

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE <div style="text-align: center;">J</div>		PAGE OF PAGES <div style="text-align: center;">1   3</div>	
2. AMENDMENT/MODIFICATION NO. 0006		3. EFFECTIVE DATE 19-Jun-2002		4. REQUISITION/PURCHASE REQ. NO. W16ROE-2114-9734		5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, NEW YORK ATTN: CENAN-CT ROOM 1843 26 FEDERAL PLAZA (DACA51) NEW YORK NY 10278-0090		CODE DACA51		7. ADMINISTERED BY (If other than item 6) <div style="text-align: center;"><b>See Item 6</b></div>		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACA51-02-B-0008	
				X		9B. DATED (SEE ITEM 11) 24-May-2002	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended.  Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning <u>  1  </u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
<b>13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.</b> <b>IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) The purpose of Amendment 0006 is to clarify contractor questions, "Geothermal Wellfields, revitalize Barracks USMA Preparatory School Building 1204 & 1205, Fort Monmouth, Eatontown, NewJersey."  NOTE: Bidders must acknowledge receipt of this amendment by the date specified in the solicitation (or as amended) by one of the following methods: In the space provided on the SF 1442, by separate letter, or by telegram, or by signing Block 15 below. FAILURE TO ACKNOWLEDGE AMENDMENTS BY THE TIME SPECIFIED MAY RESULT IN REJECTION OF YOUR BID IN ACCORDANCE WITH THE LATE BID, LATE MODIFICATIONS OF BIDS OR LATE WITHDRAWAL OF BIDS (FAR 14.304).  The Bid Opening Date remains unchanged, 25 June 2002.							
<small>Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.</small>							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR  _____ (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA  BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED  19-Jun-2002	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

AMENDMENT NO. 6  
GEOTHERMAL WELL FIELDS  
REVITALIZE BARRACKS  
USMA PREPARATORY SCHOOL BLGS 1204 AND 1205  
June 18, 2002  
U. S. ARMY CORPS OF ENGINEERS  
NEW YORK DISTRICT  
DACA51-02-B-0008

**General Notes:**

The General Contractor (building contractor) shall excavate the area within the MER room and the area directly under the loading dock concrete slab. All other excavation to be performed by GT contractor, General Contractor (building contractor) shall perform cutting and patching. GT contractor to mark out all areas, sleeves, etc and coordinate with GC.

Where possible all trees should remain and be protected and preserved. If a tree has to be removed to accommodate new GT piping then it shall be removed by the GT contractor or his subcontractor.

**SPECIFICATIONS**

Section 00800 Paragraph 17 Add following to paragraph a).

Contractor shall be provided with water from one fire hydrant selected by the Fort. This hydrant shall serve as a water source for the duration of the contract. A meter supplied and installed by the GT contractor, at his own cost, shall meter the water. (Fort Monmouth shall approve the type of meter) Cost of water shall be reimbursed to the Fort on a monthly basis. Approval shall be obtained from the Fort's fire department through submittal process of required appurtenance. GT contractor to truck water around site if required.

Specification Par 15741-2.7.2 shall be modified to read:

The K value of the grouting compound shall be  $K = 0.88 \text{ btw /hr/ ft/ } ^\circ\text{F}$ .

Specification 15741 section 3.4

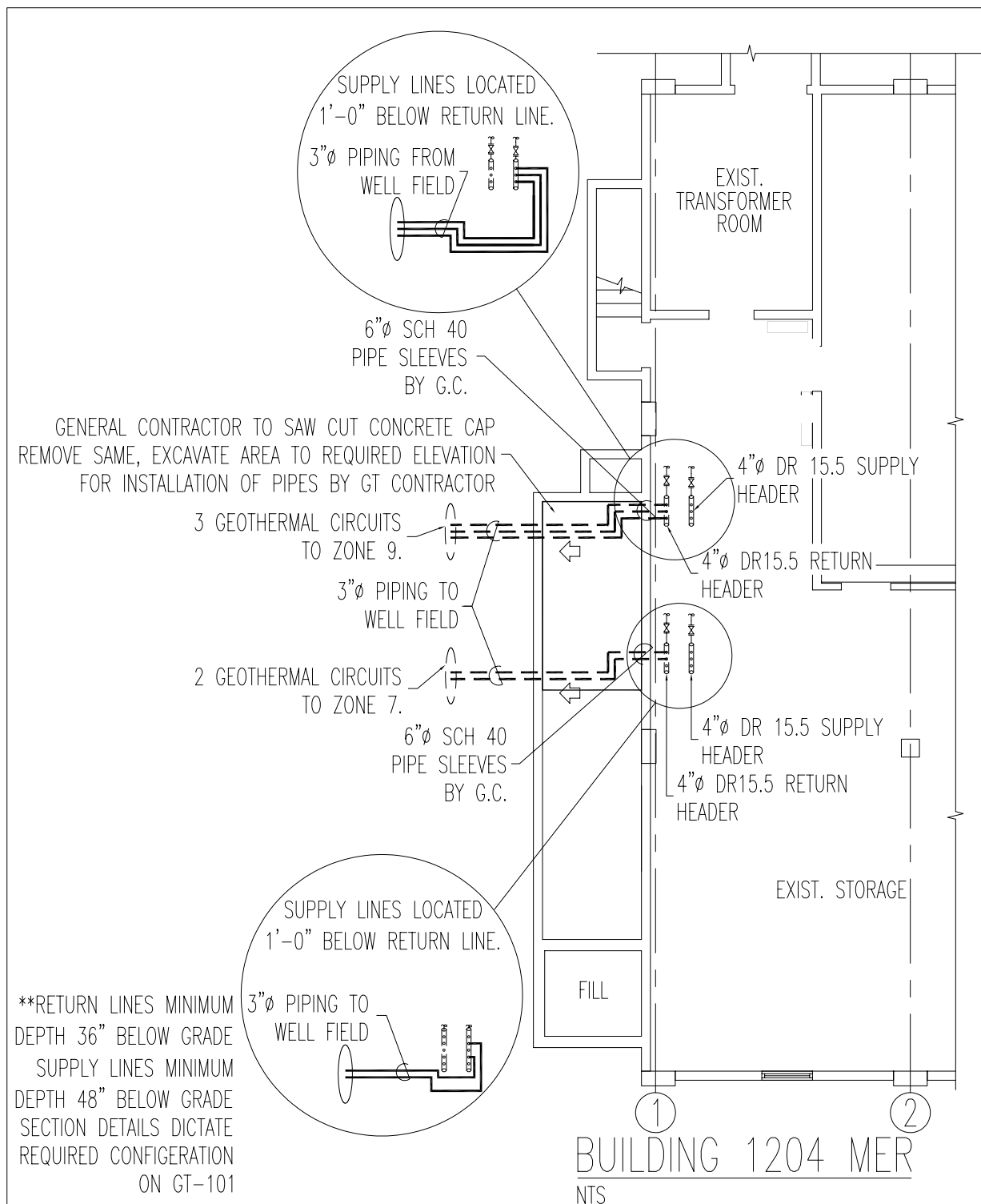
Add the following paragraph after paragraph (a)

Where two GT pipes (S&R) are required serving a common well system, it is acceptable for both pipes to be installed 48" below grade in lieu of the supply being installed 48" below grade and the return being installed 36" below grade. It is preferable that GT pipes be installed 48" below grade but this detail may impact excavated trench width. No extras will be considered if GT contractor opts to lay all pipes at 48" below grade for expedient excavation looping and back filling reasons.

### **Sketches**

Attached (SK-1, SK-2 and SK-3) three sketches for coordination of GT piping entering building with the Barracks General Contractor.

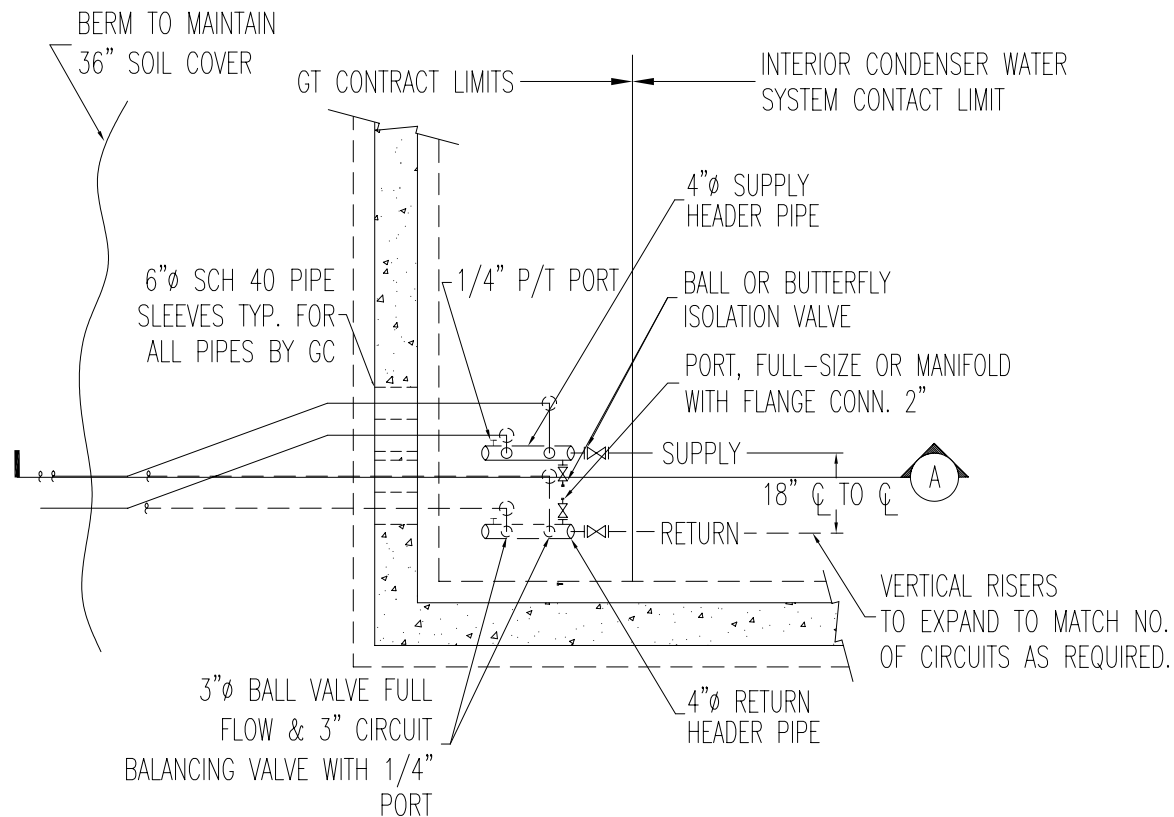
SK-4 is the boring log for existing GT Test Well # 5. Test well #5 is 300ft deep and utilized 1-1/4" dia GT U-bend test bore, results are not available for review.



DETAILS APPLICABLE FOR MECHANICAL ROOMS:

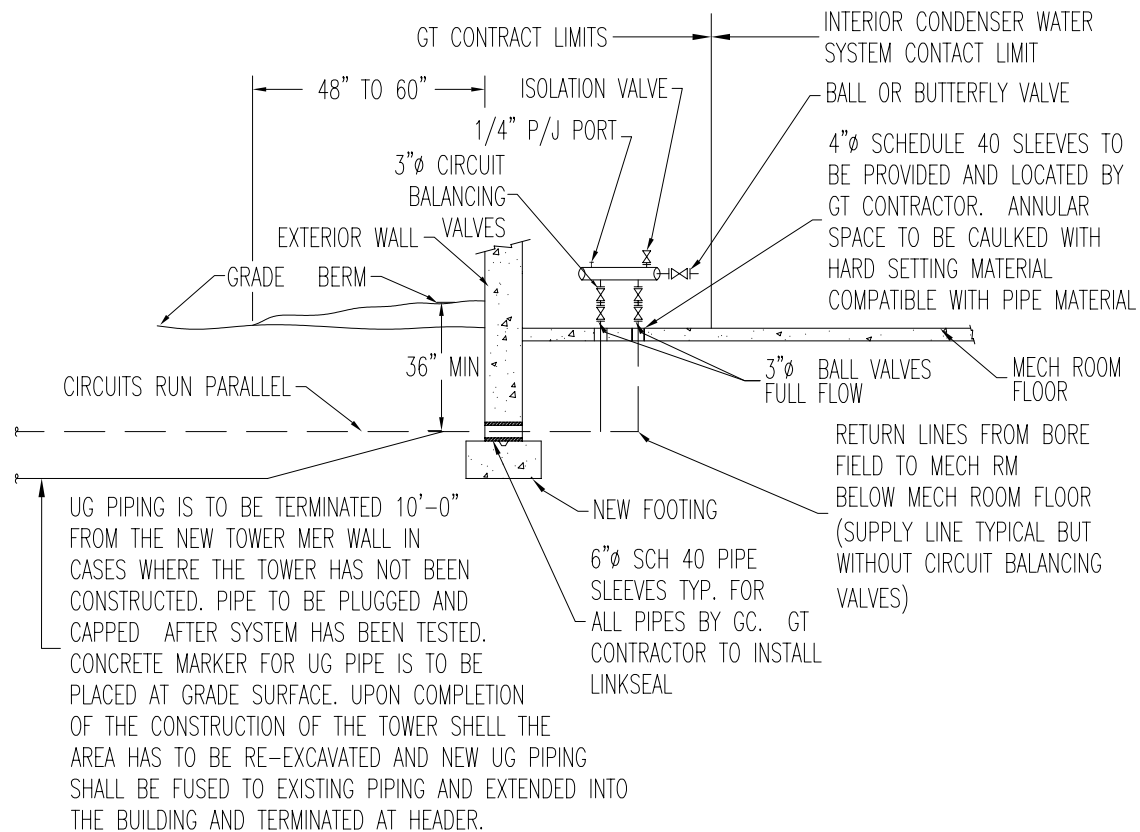
MER 113, BUILDING 1204 - 1 SET-3"Ø S & R CIRCUITS  
 MER 114, BUILDING 1204 - 1 SET-3"Ø S & R CIRCUITS  
 MER 112, BUILDING 1205 - 1 SET-3"Ø S & R CIRCUITS  
 MER 114, BUILDING 1205 - 1 SET-3"Ø S & R CIRCUITS  
 MER 123, BUILDING 1205 - 2 SET-3"Ø S & R CIRCUITS  
 MER 126, BUILDING 1205 - 2 SET-3"Ø S & R CIRCUITS  
 MAIN MER BUILDING 1204 - 5 SET-3"Ø S & R CIRCUITS

GT CONTRACTOR TO CO-ORDINATE WORK WITH GENERAL CONTRACTOR



TYPICAL PLAN VIEW FOR ALL FIRST FLOOR TOWER MER ROOMS

N.T.S.



### SECTION A TYPICAL FOR ALL FIRST FLOOR MER ROOMS

#### GENERAL NOTES:

G.C. TO CORE DRILL WALLS REQUIRING SCH 40 SLEEVES IN EXISTING STRUCTURES. COORDINATE WITH GT CONTRACTOR FOR INVERT LEVELS. IN NEW TOWERS, SLEEVES TO BE CAST AT INVERT LEVELS PROVIDED IN GT SUBMITTALS (TYPICALLY 48" FROM GRADE TO C OF SLEEVE.) IN ALL CASES UPON COMPLETION OF GT PIPING GC TO BACK FILL AREA WITH BANK RUN GRAVEL, COMPACT USING MECHANICAL VIBRATOR, PROVIDE 6" O.C. x 6" O.C. OPEN MESH WITHIN CONCRETE SLAB. AREA TO BE PATCHED WITH 3500PSI CONCRETE INSTALLED LEVEL AND SMOOTH COORDINATE ELEVATION OF PIPES GOING THRU WALLS WITH GT CONTRACTOR.

# CHESAPEAKE

## GEOSYSTEMS, INC.

410/789-5020

410/789-5029 FAX

### RECORD OF SOIL EXPLORATION

CONTRACTED WITH Stanton and Chow BORING # Test Loop #1PROJECT NAME Ft. Monmouth Bldg 1204+1205 JOB # 01-045LOCATION Tinton Falls New Jersey

## SAMPLER

 Datum \_\_\_\_\_ Hammer Wt. \_\_\_\_\_ Lbs. Rock Core Dia. \_\_\_\_\_ Foreman C. Lawyer  
 Surf. Elev. \_\_\_\_\_ Ft. Hammer Drop \_\_\_\_\_ in. Hole Diameter 6 inch Inspector \_\_\_\_\_  
 Date Started 6-6-01 Pipe Size 2 7/8 in. Boring Method Mud Rotary Date Completed 6-7-01

ELEV.	SOIL DESCRIPTION Color, Moisture, Density, Plasticity, Size Proportions	STRATA DEPTH	DEPTH SCALE	SAMPLE					BORING & SAMPLING NOTES
				Cond.	Blows/5"	No.	Type	Rec.	
	Brown Fine to Coarse Sand w/ trace of clay and Silt	54.0	50						Installed 1.25 inch Geo-Loop @ 305 Ft B.G.S. Annular space Grouted w/ Thermal Enhanced Grout
	Brown, Gray Silty Sand w/ trace of gravel		100						
			150						
		178.0							
	Pk. Gray Layered Fine Sandy Silt and Clayey Silt		200						
			250						
			300						
	Bottom of Test Hole 305 Ft.		350						

## SAMPLER TYPE

 DS - DRIVEN SPLIT SPOON  
 PT - PRESSED SHELBY TUBE  
 CA - CONTINUOUS FLIGHT AUGER  
 RC - ROCK CORE

## SAMPLE CONDITIONS

 D - DISINTEGRATED  
 I - INTACT  
 U - UNDISTURBED  
 L - LOST

## GROUND WATER DEPTH

 AT COMPLETION \_\_\_\_\_ FT.  
 AFTER \_\_\_\_\_ HRS \_\_\_\_\_ FT.  
 AFTER \_\_\_\_\_ 24 HRS \_\_\_\_\_ FT.

## BORING METHOD

 HSA - HOLLOW STEM AUGERS  
 CFS - CONTINUOUS FLIGHT AUGERS  
 DC - DRIVING CASING  
 MD - MUD MOTOR DRILLING

TOTAL P.02